SEISMIC SYSTEM/LOADING DATA:

MAIN BUILDING

SEISMIC FORCE RESISTING SYSTEM (SFRS)

SFRS: SYSTEM & CONNECTIONS: (2012 OBC CLAUSE 4.1.8.9/4.1.8.10)
LATERAL LOAD RESISTING SYSTEM: CONVENTIONAL CONSTRUCTION (MASONRY SHEARWALLS)
Rd = 1.5
Ro = 1.5
CSA STANDARD: CAN/CSA S304.1-04
APPLICABLE CLAUSE(S): 4.6.3

SFRS: DIAPHRAGMS & CONNECTIONS: (2012 OBC CLAUSE 4.1.8.15)
CSA STANDARD: CAN/CSA S16-09
APPLICABLE CLAUSE(S): 27.11.1 (b)

SFRS: SYSTEM FOUNDATIONS: (2012 OBC CLAUSE 4.1.8.16)
CSA STANDARD: CAN/CSA A23.3-04 ☒ FOR ANCHORED FOOTINGS
APPLICABLE CLAUSE(S): 21.11 ☐ FOR UNANCHORED FOOTINGS
CONFIRMATION: FOUNDATIONS HAVE BEEN DESIGNED TO RESIST THE LATERAL LOAD CAPACITY OF THE SFRS INCLUDING ALL APPLICABLE AMPLIFICATION FACTORS

SEISMIC IMPORTANCE FACTOR: (2012 OBC CLAUSE 4.1.8.5)
Ie = 1.0

PROJECT CITY: (OTTAWA, CITY HALL)

SITE CLASS: THE NOTED SITE CLASSIFICATION FOR SEISMIC SITE RESPONSE AND SHEAR WAVE VELOCITY PARAMETERS INDICATED ARE AS REPORTED IN THE GEOTECHNICAL REPORT No. 61446.15 (MAR 23, 2017 & JUNE 2, 2017) PREPARED BY HOULE CHEVRIER ENGINEERING
REFER TO THE NOTED GEOTECHNICAL REPORT FOR V's, N60, AND/OR Su VALUES USED TO DETERMINE SITE CLASSIFICATION.

☐ A ☐ B ☐ C ☒ D ☐ E ☐ F (SITE SPECIFIC SPECTRUM: OTTAWA, CITY HALL)

PGA: 0.320

RESPONSE SPECTRUM DATA:

5% DAMPED SPECTRAL RESPONSE ACCELERATION VALUES: (2012 OBC SUPPLEMENT STANDARD SB-1)

Sa (0.2) = 0.640
Sa (0.5) = 0.310
Sa (1.0) = 0.140
Sa (2.0) = 0.046

DESIGN SPECTRAL RESPONSE ACCELERATION VALUES (DSRAV): (2012 OBC CLAUSE 4.1.8.4)

☒ CLASS D: (Fa=1.144/Fv=1.36)

S (0) = 0.732
S (0.2) = 0.732
S (0.5) = 0.422
S (1.0) = 0.190
S (2.0) = 0.062
S (4.0) = 0.031

SYSTEM RESTRICTION VALUE: IeFaSa(0.2) = 0.732 ≥ 0.35 ☒ YES ☐ NO

PERIOD DATA:

STATIC PERIOD: (2012 OBC CLAUSE 4.1.8.11(3))

Ta (STATIC) NS = 0.236 sec
Ta (STATIC) EW = 0.236 sec

MODAL PERIOD: (2012 OBC CLAUSE 4.1.8.11(3) AND 4.1.8.3(8))

Ta (MODAL) NS = N/A
Ta (MODAL) EW = N/A

DESIGN PERIODS/MODE & MOMENT FACTORS: (2012 OBC CLAUSE (4.1.8.11(5))

Sa(0.2) / Sa(2.0) = 13.9 ≥ 8.0 ☒ YES ☐ NO

Ta (DESIGN) NS = 0.236 sec MV = 1.00 J = 1.00
Ta (DESIGN) EW = 0.236 sec MV = 1.00 J = 1.00

DESIGN FUNDAMENTAL PERIOD BASED DSRAV:

S(Ta) NS = 0.695
S(Ta) EW = 0.695

IRREGULARITY REVIEW (2012 OBC CLAUSE 4.1.8.6)

1.	VERTICAL STIFFNESS:	☐ YES	☒ NO
2.	WEIGHT:	☐ YES	☒ NO
3.	VERTICAL GEOMETRIC:	☐ YES	☒ NO
4.	IN PLANE DISCONTINUITY:	☐ YES	☒ NO
5.	OUT OF PLANE:	☐ YES	☒ NO
6.	WEAK STOREY:	☐ YES	☒ NO
7.	TORSIONAL: B NS = 1.5, B EW = 1.4	☐ YES	☒ NO
8.	NON-ORTHAGONAL:	☐ YES	☒ NO

CONCLUSION: BUILDING IS ☒ REGULAR ☐ IRREGULAR
DYNAMIC ANALYSIS: ☐ REQUIRED ☒ NOT REQUIRED
DYNAMIC PROCEDURE METHOD: ☐ MODAL RESPONSE SPECTRUM ☐ NUMERICAL INTEGRATION TIME HISTORY ☒ N/A

TORSIONAL ECCENTRICITY: ☒ ± 0.10 Dnx (4.1.8.11(10a), B ≤ 1.7 EQUIV. STATIC FORCE PROCEDURE)
☐ ± 0.10 Dnx (4.1.8.12(4a), B ≥ 1.7)
☐ ± 0.05 Dnx (4.1.8.12(4b), B < 1.7, 3-D DYNAMIC ANALYSIS)

STRUCTURAL SEPARATION: ☒ THE NEW AND EXISTING STRUCTURES HAVE BEEN SEPARATED IN ACCORDANCE WITH 4.1.8.14(1) OF THE 2012 O.B.C.
☐ N/A

BASE SHEARS/MOMENTS: (2012 OBC CLAUSE 4.1.8.11)

Vstatic = S(Ta)MvIeW/(RdRo) = 1187 kN W = 3840 kN

STATIC MAXIMUM/MINIMUM VALUES:

NORTH-SOUTH: (↕)

Vmin = S(4.0)MvIeW/(RdRo) = 72 kN W = 3840 kN
Vmax = 2/3 S(0.2)IeW/(RdRo) = 833 kN W = 3840 kN

EAST-WEST: (↔)

Vmin = S(4.0)MvIeW/(RdRo) = 72 kN W = 3840 kN
Vmax = 2/3 S(0.2)IeW/(RdRo) = 833 kN W = 3840 kN

SEISMIC LOADS	
STATIC LOADS	DESIGN LOADS
NORTH-SOUTH: (↕)	
Vstns = 833 kN W = 3840 kN Mstns = 6580 kNm	Vdns = 833 kN Mdns = 6580 kNm
EAST-WEST: (↔)	
Vstew = 833 kN W = 3840 kN Mstew = 6580 kNm	Vdew = 833 kN Mdew = 6580 kNm

NOTES:

1) DYNAMIC LOAD SCALING FACTOR

$$S.F. = g \cdot \frac{Ie}{RdRo} = 0.444\ g$$

2) DESIGN LOAD SHEAR VALUES ARE BASED ON THE EVALUATION OF Vst AND Vd IN ACCORDANCE WITH 4.1.8.12 (5),(6),(7),(8), AND (9) OF THE 2012 OBC. LOADS INDICATED SHOW THE DESIGN BASE SHEAR AND CORRESPONDING OVERTURNING MOMENT.

WIND UPLIFT (REF FIG I-9 NBC 2010 STRUCTURAL COMMENTARY I)

PNET = 1.4 (pe-pi) - 0.9 D
Pe = Iw q Ce Cp Cg
Pi = Iw q Ce Cpi Cgi
z = 1.9 m

Pf = 1.4 Pw NET - 0.9 Pd
Pw NET = Pe - Pi
Pw NET INTERIOR = 0.97 kPa
Pw NET PERIMETER = 1.22 kPa

DESIGN SNOW LOAD PARAMETERS
OTTAWA, ONTARIO, CANADA
S= Is [Ss(CbCwCsCa)+Sr]
Ss = 2.4 kPa
Sr = 0.4 kPa
Is = 1.0 FOR NORMAL
S= 1.0 [2.4(0.8x1.0x1.0x1.0)+0.4]
S= 2.32 kPa

WIND

(2012 OBC 4.1.7, 2010 NBC COMMENTARY FIGURE I-7 TO I-9)
P= Iw q Ce Cp Cg
q = 0.41 kPa
Iw (uls) = 1.0 Iw (sls) = 0.75
Ce = VARIES FROM 0.9 TO 1.4
CpCg = 1.3 OR 1.95

	N.S (↕)	E.W (↔)	UNITS
VBASE	172	82	KN
MBASE	1359	648	KN.m

NORTH FOR THE PURPOSES OF THIS DATA IS AT THE TOP SIDE OF ALL PLANS IN THIS SET OF DRAWINGS

DRAWING LIST

DELETED

No.	REVISION	DATE
3	RE-ISSUED FOR PHASE 2 BUILDING PERMIT	MAR 8/18
2	ISSUED WITH IB-S02-A	JAN 25/18
1	ISSUED FOR BUILDING PERMIT	OCT 27/17

1. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND VERIFYING ALL DIMENSIONS. ANY DISCREPANCY SHALL BE REPORTED TO THE ENGINEER.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL MATERIAL RELEVANT TO THE PROJECT.
3. ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH THE DRAWINGS IN THE CONTRACT DOCUMENTS.
4. DO NOT SCALE DRAWINGS.

PROJECT
BOYS & GIRLS CLUB OF OTTAWA
1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

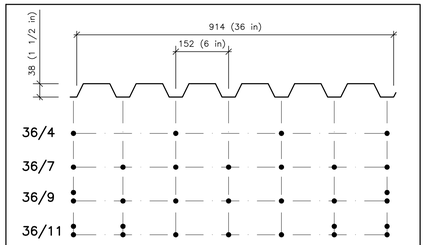
DRAWING
SEISMIC DATA

CUNLIFFE & ASSOCIATES
CONSULTING STRUCTURAL ENGINEERS
102-1737 WOODWARD DR. OTTAWA ONT. K2C 0P9
TEL (613) 729-7242 FAX (613) 728-1461
Email <cunliffe@cunliffe.ca>

ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. I. CUNLIFFE
PROVINCE OF ONTARIO

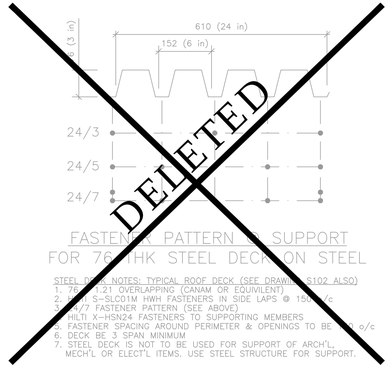
SCALE: NOT TO SCALE
DRAWN: RW
REVIEWED: RIC
PROJECT NO.: 17-007
REVISION NO.: 3
SHEET No.: S00



TYPICAL FASTENER PATTERNS @ SUPPORT FOR 38 THK STEEL DECK

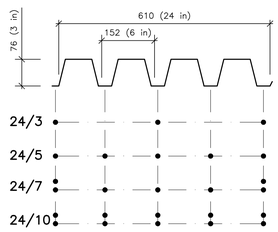
STEEL DECK NOTES: TYPICAL ROOF DECK (SEE DRAWING S102 ALSO)
1. 38 x 0.91 OVERLAPPING (CANAM OR EQUIVALENT)
2. HILTI S-SLC01M HWH FASTENERS IN SIDE LAPS @ 150 o/c
3. 36/7 FASTENER PATTERN (SEE ABOVE)
4. HILTI X-HSN24 FASTENERS TO SUPPORTING MEMBERS
5. FASTENER SPACING AROUND PERIMETER & OPENINGS TO BE 150 o/c
6. DECK BE 3 SPAN MINIMUM
7. STEEL DECK IS NOT TO BE USED FOR SUPPORT OF ARCH'L, MECH'L OR ELECT'L ITEMS. USE STEEL STRUCTURE FOR SUPPORT.
8. USE ACOUSTIC DECK WHERE NOTED ON PLAN

DELETED



FASTENER PATTERN @ SUPPORT
FOR 76 THK STEEL DECK ON STEEL

STEEL DECK NOTES: TYPICAL ROOF DECK (SEE DRAWING S102 ALSO)
1. 76 x 1.21 OVERLAPPING (CANAM OR EQUIVILENT)
2. HILTI S-SLC01M HWH FASTENERS IN SIDE LAPS @ 150 o/c
3. 24/7 FASTENER PATTERN (SEE ABOVE)
4. HILTI X-HSN24 FASTENERS TO SUPPORTING MEMBERS
5. FASTENER SPACING AROUND PERIMETER & OPENINGS TO BE 150 o/c
6. DECK BE 3 SPAN MINIMUM
7. STEEL DECK IS NOT TO BE USED FOR SUPPORT OF ARCH'L, MECH'L OR ELECT'L ITEMS. USE STEEL STRUCTURE FOR SUPPORT.



FASTENER PATTERN @ SUPPORT FOR 76 THK STEEL DECK ON GYM ROOF

STEEL DECK NOTES: TYPICAL ROOF DECK (SEE DRAWING S102 ALSO)
1. 76 x 1.21 INTERLOCKING (CANAM OR EQUIVILENT)
2. ZONE 1- BUTTON PUNCH SIDE LAPS @ 75 o/c
   ZONE 2- BUTTON PUNCH SIDE LAPS @ 150 o/c
3. ZONE 1- 24/10 WELD PATTERN (SEE ABOVE)
   ZONE 2- 24/7 WELD PATTERN (SEE ABOVE)
4. ZONE 1 & ZONE 2- 19 mm ø PUDDLE WELDS TO SUPPORTING MEMBERS
5. USE WASHERS TO PREVENT WELD BURN THROUGH OF WELDS.
6. WELD SPACING AROUND PERIMETER & OPENINGS TO BE 150 o/c
7 DECK BE 3 SPAN MINIMUM
8. STEEL DECK IS NOT TO BE USED FOR SUPPORT OF ARCH'L, MECH'L OR ELECT'L ITEMS. USE STEEL STRUCTURE FOR SUPPORT.

G E N E R A L N O T E S

1. ANY DEVIATION FROM THE CONDITIONS SHOWN ON THESE DRAWINGS MUST BE REPORTED TO THE ENGINEER.

2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 4 OF THE O.B.C. (2012 EDITION) ONTARIO REGULATION 332/12 (AS AMENDED)

3. STANDARDS
   -CSA STANDARD A23.3-04 DESIGN OF CONCRETE STRUCTURES
   -CAN/CSA-S16-09 LIMIT STATES DESIGNS OF STEEL STRUCTURES
   -CSA STANDARD S304.1-04 DESIGN OF MASONRY STRUCTURES
   -CAN/CSA-O86-09 ENGINEERING DESIGN IN WOOD

4. ANY MODIFICATIONS TO EXISTING STRUCTURES ARE TO BE LIMITED TO WORK NOTED ON THESE DRAWINGS. ANY ADDITIONAL OR PROPOSED MODIFICATIONS TO EXISTING STRUCTURES MUST BE APPROVED BY THE ENGINEER

5. FOUNDATIONS
   .1 ALL FOOTINGS ARE TO BEAR ON ENGINEERED FILL.
   .2 BEARING CAPACITY USED IN THE FOOTING DESIGN IS ASSUMED TO BE SLS= 100 kPa/ULS= 200 kPa
   .3 BEARING SURFACE IS TO BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.
   .4 FOR FURTHER INFORMATION SEE GEOTECHNICAL REPORT No. 61446.15 (MAR 23, 2017 & JUNE 2, 2017) PREPARED BY HOULE CHEVRIER ENGINEERING
   .5 STEP FOOTINGS WHERE INDICATED ON PLAN AT THE RATE OF 2 HORIZONTAL TO 1 VERTICAL.

6. SLABS ON GRADE
   .1 SLABS ON GRADE TO BE UNREINFORCED UNLESS NOTED.
   .2 FOR COMPOSITION & COMPACTION OF FILL SUPPORTING SLABS ON GRADE SEE GEOTECHNICAL REPORT.
   .3 PROVIDE 12 mm ASPHALT IMPREGNATED FIBREBOARD BETWEEN SLABS ON GRADE & FOUNDATION WALLS OR COLUMNS.
   .4 SAWCUT SLAB ON GRADE TO (1/4 x SLAB DEPTH) 8 HOURS AFTER CONCRETE PLACEMENT.
   .5 SPACE SAWCUTS ON A 4500 mm x 4500 mm MAXIMUM GRID. AVOID LONG & NARROW SAWCUT PATTERNS. LOCATE SAWCUTS ALONG COLUMN LINES WHERE POSSIBLE. CONTRACTOR IS TO PROVIDE THE ENGINEER WITH DOCUMENTATION SHOWING PROPOSED SAWCUT LOCATIONS FOR APPROVAL UNLESS SAWCUTS LOCATIONS ARE OTHEREWISE INDICATED ON THESE DRAWINGS.

7. MATERIALS
   .1 CONCRETE STRENGTH AT 28 DAYS TO BE AS NOTED ON DRAWINGS AND SPECIFICATIONS.
   .2 REINFORCING STEEL TO BE DEFORMED GRADE 400R WITH Fy= 400 MPa.
   .3 HOLLOW STRUCTURAL STEEL SECTIONS TO BE ASTM A500 GRADE C OR G40.21 350W CLASS C.
   .4 ALL "W" SHAPE STEEL SECTIONS TO BE GRADE G40.21 350W WITH Fy= 350 MPa.
   .5 ALL OTHER STRUCTURAL STEEL TO BE GRADE G40.21 300W WITH Fy= 300 MPa UNLESS NOTED OTHERWISE.
   .6 ALL STRUCTURAL STEEL TO RECEIVE 1 SHOP APPLIED COAT OF PRIMER UNLESS NOTED.
   .7 ALL STRUCTURAL STEEL EXPOSED TO EXTERIOR IS TO BE HOT DIP GALVANIZED UNLESS NOTED.
   .8 ANCHOR BOLTS TO BE A307.
   .9 ALL OTHER BOLTS TO BE A325.
   .10 A325 BOLTS EXPOSED TO EXTERIOR ARE TO BE STAINLESS STEEL
   .11 A307 BOLTS EXPOSED TO EXTERIOR ARE TO BE GALVANIZED.
   .12 CONCRETE BLOCK TO BE H/15/A/M & IMPERIAL VERSION
   .13 CONCRETE BLOCK MASONRY MORTAR TO BE 8.5 MPa TYPE 'S' U/N.
   .14 CONCRETE BLOCK MASONRY GROUT TO BE 12 MPa "HIGH SLUMP" (200-250 mm SLUMP)

8. CONCRETE COVER
   .1 FOOTINGS 75 mm BOTTOM, 50 mm SIDES
   .2 WALLS 40 mm UNLESS NOTED OTHERWISE

9. REINFORCING STEEL DESIGNATION
   8-20M x 1500 T/B
   8 = NUMBER OF BARS
   20M = SIZE OF BARS
   1500 = LENGTH OF BARS
   T = BAR LOCATION - TOP
   B = BAR LOCATION - BOT
   LENGTH OF BARS DOES NOT INCLUDE HOOKS OR BENDS

10. DOWELS
    DOWELS TO FOOTINGS TO BE OF SAME DIAMETER AS THE LOWEST LIFT OF VERTICAL REINFORCING IN COLUMNS, PIERS OR WALLS.

11. REINFORCING STEEL SPLICES
    REINFORCING STEEL SPLICES TO BE AS NOTED IN REINFORCING BAR LAP LENGTH TABLE ON S01 U/N.

12. OPENINGS
    .1 AT OPENINGS IN WALLS PROVIDE 2-20M T & B OF OPENING EXTENDING 600 mm MIN. BEYOND CORNERS OF OPENINGS.
    .2 FOR ADDITIONAL OPENINGS 300 x 300 OR SMALLER SEE ARCHITECTURAL & MECHANICAL DRAWINGS.
    .3 REPORT ANY OPENINGS LARGER THAN 300 x 300 NOT SHOWN ON THESE DRAWINGS TO THE ENGINEER.

13. LOADS
    ALL LOADS & FORCES INDICATED ON THESE DRAWINGS ARE UNFACTORED WORKING LOADS UNLESS NOTED.

14. CONCRETE BLOCK MASONRY
    .1 140 mm CONCRETE BLOCK
    VERT: 1-15M @ 800 o/c
    HORIZ: HL2 @ 400 o/c
    .2 190 mm CONCRETE BLOCK
    VERT: 1-15M @ 800 o/c
    HORIZ: HL2 @ 200 o/c
    .3 240 mm CONCRETE BLOCK
    ALL WALL LOCATIONS UNLESS NOTED BELOW
    VERT: 1-20M @ 600 o/c
    HORIZ: HL2 @ 200 o/c
    ADDN'L AT BLOCK BELOW CORNER WINDOWS
    20M @ 800 o/c IN LOW WEB BLOCK
    WALL LOCATED ON GRID 1x BETWEEN GRIDS M & N
    VERT: 1-20M @ 800 o/c
    HORIZ: HL2 @ 200 o/c
    WALL LOCATED ON GRID 8b BETWEEN GRIDS N & k
    VERT: 1-20M @ 800 o/c
    HORIZ: HL2 @ 200 o/c

    LEGEND
    S- STANDARD 9 GAUGE LONGITUDINAL & CROSS WIRES
    H- HEAVY 5 mm LONGITUDINAL WIRES, 9 GAUGE CROSS WIRES
    L- LADDER TYPE REINFORCEMENT
    T- TRUSS TYPE REINFORCEMENT
    2-2 LONGITUDINAL WIRES

    .5 SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR TYING MASONRY TO BACK UP WALLS.
    .6 SPECIAL WALLS - SEE NOTES ON PLANS FOR ADDITIONAL REINFORCING AND GROUTING OTHER THAN INDICATED ABOVE
    .7 REINFORCE CELLS @ END OF WALLS AT INTERSECTING WALLS & BESIDE OPENINGS.
    .8 GROUT MASONRY SOLID BELOW BEARING BASE PLATES FOR 500mm MIN.
    .9 PROVIDE A CONCRETE BOND BEAM COURSE c/w 1-20M CONT. USING LOW WEB BLOCKS AT THE TOP OF WALLS AND AT EACH FLOOR LEVEL U/N. GROUT COURSE SOLID.
    .10 PROVIDE 1-20M CORNER BAR (750 BEND x 750 BEND) AT AT CONCRETE BOND BEAM COURSES @ BLOCK WALL INTERSECTIONS.
    .11 PROVIDE "CLEAN OUTS" AT BOTTOM OF CELLS TO BE GROUTED TO ENSURE PROPER LAP LENGTH AND THAT CELL IS FILLED SOLIDLY. MAXIMUM GROUT LIFT IS 3 metres. GROUT TO HAVE 250mm SLUMP
    .12 EMBEDMENT OF MASONRY DOWELS IN CONCRETE STRUCTURE BELOW CONCRETE BLOCK WALLS TO BE AS FOLLOWS:
    15M DOWELS = 600 mm EMBEDMENT - 1300 Lg. DOWEL
    20M DOWELS = 800 mm EMBEDMENT - 1700 Lg. DOWEL
    .13 BLOCK CONTROL JOINT SPACED AT 9000 mm MAXIMUM VENEER CONTROL JOINT SPACED AT 12000 mm MAXIMUM COORDINATE LOCATION OF JOINTS WITH ARCHITECT & ENGINEER

15. LEGEND

B	=	BOTTOM
B1	=	BOTTOM LOWER LAYER
B2	=	BOTTOM UPPER LAYER
BLL	=	BOTTOM LOWER LAYER
BBP1	=	BEAM (OR OWSJ) BEARING PLATE NUMBER
BUL	=	BOTTOM UPPER LAYER
CONT	=	CONTINUOUS
DP	=	DEPTH
DWL	=	DOWELS
EF	=	EACH FACE
EL	=	ELEVATION
ES	=	EACH SIDE
EW	=	EACH WAY
F1	=	PAD FOOTING NUMBER
H	=	HORIZONTAL
(H)	=	HOOKED BAR
O/C	=	ON CENTER
SC1	=	STEEL COLUMN NUMBER
T	=	TOP
T1	=	TOP UPPER LAYER
T2	=	TOP LOWER LAYER
TLL	=	TOP LOWER LAYER
TUL	=	TOP UPPER LAYER
U/N	=	UNLESS NOTED OTHERWISE
V	=	VERTICAL
WB1	=	WOOD CONNECTOR BRACKETS
WF1	=	WALL FOOTING NUMBER
WP1	=	WOOD POST

CONCRETE BLOCK MASONRY WALLS
REINFORCING BAR LAP LENGTH TABLE

REINFORCING BAR LAP LENGTH (mm)

HJR	10M	15M	20M	25M	30M
300	525	750	925	1450	1725

FOR SPECIAL CONDITIONS MULTIPLY THE VALUES LISTED ABOVE BY THE FOLLOWING FACTORS:
1. EPOXY COATED REINFORCING (X 1.5)
2. HORIZONTAL REINFORCING WITH >300 mm GROUT BELOW (X 1.3)
3. FOR CONDITIONS 1 & 2 OCCURING SIMULTANEOUSLY (X 1.7)

DESIGN & DETAILING CRITERIA FOR SUPPLIERS

1. STRUCTURAL STEEL CONNECTIONS
   STRUCTURAL STEEL CONNECTIONS ARE TO BE DESIGNED AND DETAILED BY STRUCTURAL STEEL SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED "FOR CONNECTIONS ONLY" BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. INSPECTION OF WELDS, CONNECTIONS & INSTALLATION IS TO BE UNDERTAKEN BY A 3RD PARTY, CERTIFIED INSPECTION SERVICE.

2. COLD FORMED STEEL STUDS & JOISTS
   STEEL STUDS & JOISTS ARE TO BE DESIGNED AND DETAILED BY STEEL STUDS & JOISTS SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL STEEL STUD & JOIST WORK IS TO BE INSPECTED DURING CONSTRUCTION BY THE STEEL STUD & JOIST DESIGN ENGINEER.

3. MISCELLANEOUS METALS
   MISC METALS ARE TO BE DESIGNED AND DETAILED BY MISC METALS SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL MISC METAL WORK IS TO BE INSPECTED DURING CONSTRUCTION BY THE MISC METALS DESIGN ENGINEER.

4. GUARDS & HANDRAILS
   GUARDS & HANDRAILS ARE TO BE DESIGNED AND DETAILED BY STEEL SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL GUARDS & HANDRAIL WORK IS TO BE INSPECTED DURING CONSTRUCTION BY THE GUARD & HANDRAIL DESIGN ENGINEER. NOTE THAT IT IS NOT ACCEPTABLE TO CORE CONCRETE FOR POST INSTALLATIONS.

5. SEISMIC RESTRAINT OF MECH'L EQUIPMENT & PIPING
   SEISMIC RESTRAINT OF MECH'L EQUIPMENT & PIPING TO BE DETAILED BY MECH'L EQUIPMENT & PIPING SUPPLIER OR CONTRACTOR. SHOP DRAWINGS ARE TO BE SUBMITTED TO CUNLIFFE & ASSOCIATES FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL SEISMIC RESTRAINT INSTALLATIONS ARE TO BE INSPECTED DURING CONSTRUCTION BY THE DESIGN ENGINEER OF RECORD

6. CONCRETE BLOCK MASONRY WALLS-CONSTRUCTION BRACING
   ALL LOAD BEARING CONCRETE BLOCK MASONRY WALLS ARE TO BE LATERALLY BRACED DURING CONSTRUCTION UNTIL STRUCTURE AND DIAPHRAGM IS CONSTRUCTED ON WALL. ALL NON LOAD BEARING CONCRETE BLOCK MASONRY WALLS ARE TO BE LATERALLY BRACED DURING CONSTRUCTION UNTIL PERMANENT LATERAL BRACING IS INSTALLED AS PER TYPICAL DETAILS AND OR SECTIONS.

   LATERAL CONSTRUCTION BRACING DRAWINGS ARE TO BE SUBMITTED TO CUNLIFFE & ASSOCIATES FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.

7. SEISMIC RESTRAINT OF SUSPENDED CEILINGS
   SEISMIC RESTRAINT OF SUSPENDED CEILINGS TO BE DETAILED BY CEILING SUPPLIER OR CONTRACTOR. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL SEISMIC RESTRAINT INSTALLATIONS ARE TO BE INSPECTED DURING CONSTRUCTION BY THE DESIGN ENGINEER OF RECORD

8. TEMPORARY SHORING (FOR DEMOLITION AND/OR CONSTRUCTION)
   TEMPORARY SHORING FOR THE PURPOSES OF DEMOLITION AND/OR CONSTRUCTION IS TO BE DESIGNED & DETAILED BY A PROFESSIONAL ENGINEER LICENSED IN ONTARIO. SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. PERMIT REVIEW OF TEMPORARY SHORING BY CUNLIFFE & ASSOCIATES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND/OR DEMOLITION AND ALSO PRIOR TO REMOVAL OF TEMPORARY SHORING.

9. GLULAM MEMBER CONNECTIONS
   GLULAM MEMBER CONNECTIONS ARE TO BE DESIGNED AND DETAILED BY GLULAM MEMBER SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED 'FOR CONNECTIONS ONLY' BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. INSPECTION OF CONNECTIONS & INSTALLATION IS TO BE UNDERTAKEN BY THE GLULAM MEMBER DESIGN ENGINEER.

10. CURTAIN WALLS
    SUPPORTS FOR CURTAIN WALLS ARE TO BE DESIGNED AND DETAILED BY CURTAIN WALL SUPPLIER. SHOP DRAWINGS ARE TO BE SUBMITTED TO DESIGN TEAM FOR REVIEW. SHOP DRAWINGS ARE TO BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. ALL SUPPORTS ARE TO BE INSPECTED DURING CONSTRUCTION BY THE SUPPORT DESIGN ENGINEER.

NOTE:
INSPECTION REPORTS CREATED AS A RESULT OF THE ABOVE NOTED WORK MUST BE SUBMITTED TO THE CONSTRUCTION MANAGER. CONSTRUCTION MANAGER IS TO PROVIDE COPIES TO THE CONSULTANTS.

REINFORCING BAR LAP LENGTH TABLE

CONCRETE STRENGTH (MPa)	REINFORCING BAR LAP LENGTH (mm)				
	10M	15M	20M	25M	30M
20	475	700	850	1325	1575
25	425	600	750	1200	1400
30	400	550	675	1100	1275
35	375	525	625	1000	1200

FOR SPECIAL CONDITIONS MULTIPLY THE VALUES LISTED ABOVE BY THE FOLLOWING FACTORS:
1. EPOXY COATED REINFORCING (X 1.5)
2. HORIZONTAL REINFORCING WITH >300 mm CONCRETE BELOW (X 1.3)
3. FOR CONDITIONS 1 & 2 OCCURING SIMULTANEOUSLY (X 1.7)

No.	REVISION	DATE
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4. DO NOT SCALE DRAWINGS.

PROJECT
BOYS & GIRLS CLUB OF OTTAWA
1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

DRAWING
GENERAL NOTES

CUNLIFFE & ASSOCIATES
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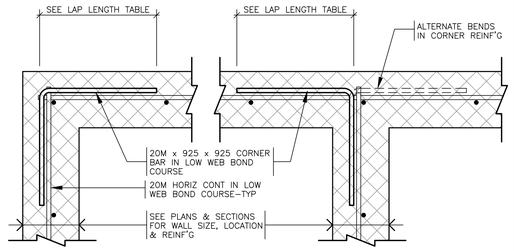
ENGINEER'S SEAL

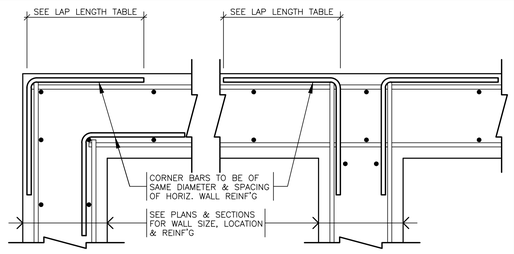
LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. I. CUNLIFFE
PROVINCE OF ONTARIO

SCALE: NOT TO SCALE
DRAWN: RW
REVIEWED: RIC
PROJECT NO.: 17-007
REVISION NO.: 3
SHEET No.: S01



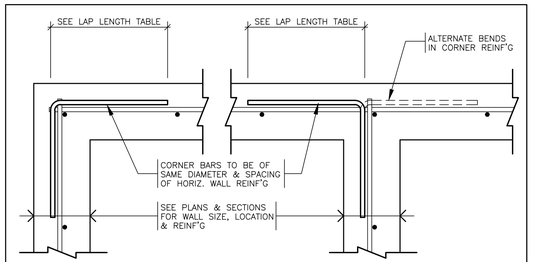
PLAN DETAIL–BLOCK WALL INTERSECTION REINFORCEMENT

NEW CONCRETE BLOCK WALLS



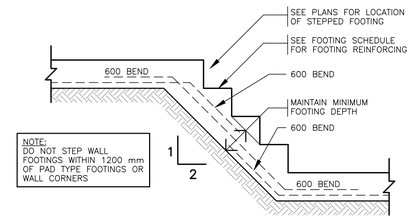
TYPICAL WALL INTERSECTION REINFORCEMENT

CONCRETE WALLS WITH 2 SHEETS OF REINFORCING (WALL THICKNESS GREATER THAN 215 mm)
NOT APPLICABLE TO SHEARWALLS. SEE SHEARWALL ELEVATION DRAWINGS

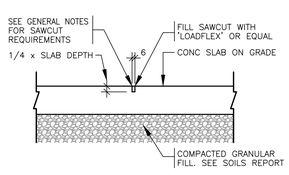


TYPICAL WALL INTERSECTION REINFORCEMENT

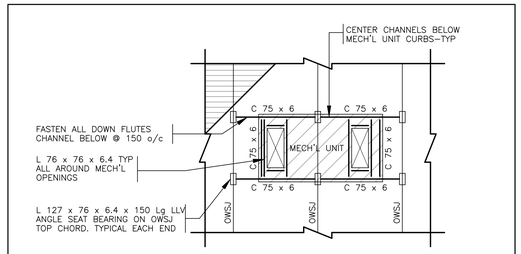
CONCRETE WALLS WITH 1 SHEET OF REINFORCING (WALL THICKNESS LESS THAN 215 mm)
NOT APPLICABLE TO SHEARWALLS. SEE SHEARWALL ELEVATION DRAWINGS



TYPICAL STEPPED WALL FOOTING DETAIL

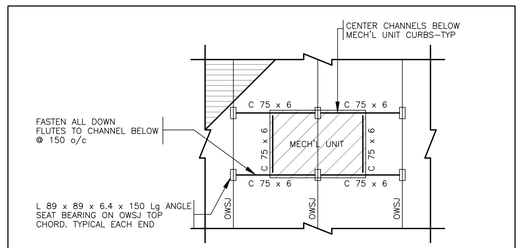


TYPICAL SAWCUT IN SLAB ON GRADE DETAIL



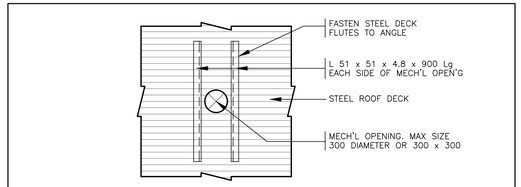
TYPICAL DETAIL– ADDITIONAL FRAMING AT ROOFTOP MECH'L UNITS

(WITH UNIT OPENINGS THROUGH ROOF)

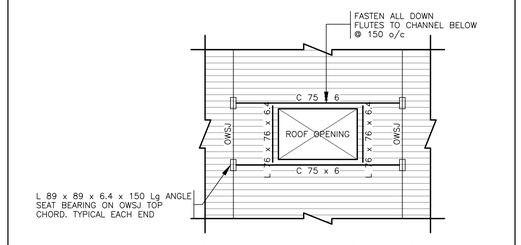


TYPICAL DETAIL– ADDITIONAL FRAMING AT ROOFTOP MECH'L UNITS

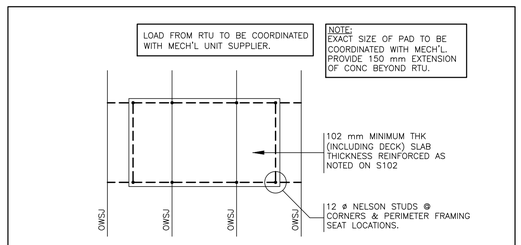
(NO UNIT OPENINGS THROUGH ROOF)



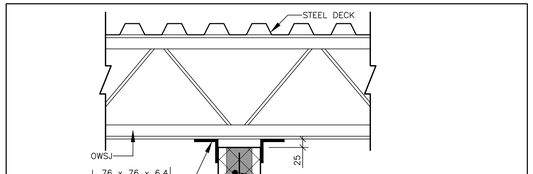
PLAN DETAIL–MECHANICAL OPENINGS



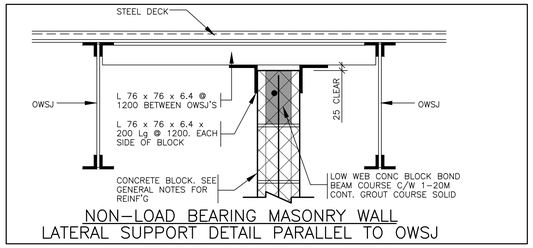
TYPICAL DETAIL– ADDITIONAL FRAMINGS AT ROOF OPENINGS



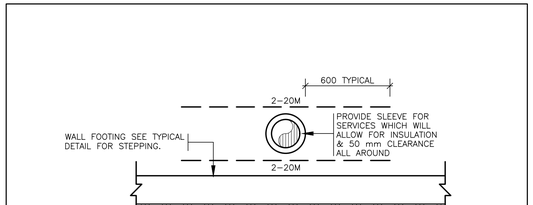
TYPICAL SCHEMATIC DETAIL– CONCRETE PAD BELOW ROOFTOP MECH'L UNITS



NON–LOAD BEARING MASONRY WALL LATERAL SUPPORT DETAIL PERPENDICULAR TO OWSJ

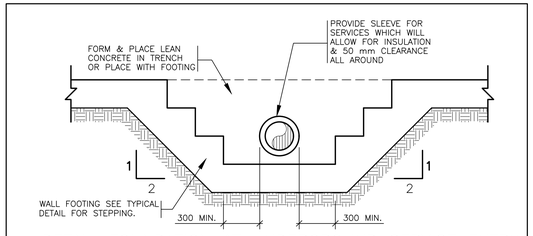


NON–LOAD BEARING MASONRY WALL LATERAL SUPPORT DETAIL PARALLEL TO OWSJ



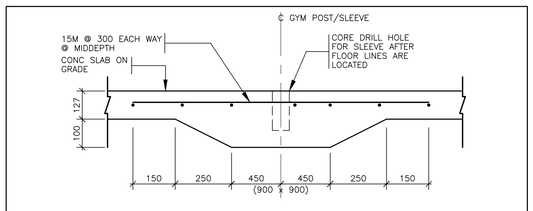
DETAIL–FOUNDATION AT SAN & STORM ENTRY

SEE PLANS AND MECHANICAL FOR LOCATION



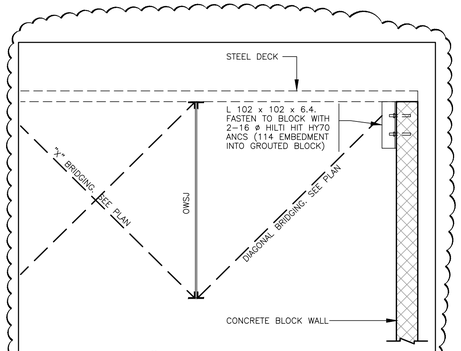
DETAIL–FOUNDATION AT UNDERGROUND SERVICE ENTRY

SEE PLANS AND MECHANICAL FOR LOCATION



TYPICAL SLAB ON GRADE THICKENING DETAIL AT GYMNASIUM FLOOR SOCKET

SEE ARCH'L FOR LOCATIONS



DETAIL–"X" BRIDGING CONNECTION TO BLOCK WALLS IN ROOMS WITH NO CEILINGS

HILTI HIT INSTALLATION REQUIREMENTS:

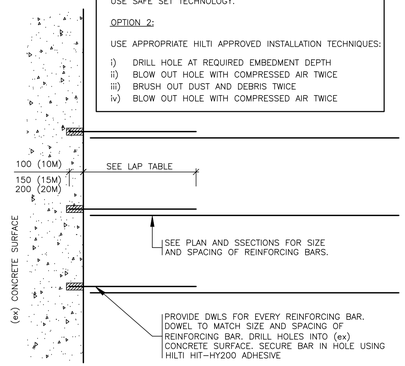
OPTION 1:

USE SAFE SET TECHNOLOGY.

OPTION 2:

USE APPROPRIATE HILTI APPROVED INSTALLATION TECHNIQUES:

i) DRILL HOLE AT REQUIRED EMBEDMENT DEPTH
ii) BLOW OUT HOLE WITH COMPRESSED AIR TWICE
iii) BRUSH OUT DUST AND DEBRIS TWICE
iv) BLOW OUT HOLE WITH COMPRESSED AIR TWICE



TYPICAL DETAIL FOR DOWELING INTO (ex) CONCRETE FOUNDATIONS

No.	REVISION	DATE
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PROJECT
BOYS & GIRLS CLUB OF OTTAWA
1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

DRAWING
TYPICAL DETAILS

CUNLIFFE & ASSOCIATES
CONSULTING STRUCTURAL ENGINEERS
102–1737 WOODWARD DR. OTTAWA ONT. K2C 0P9
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ENGINEER'S SEAL

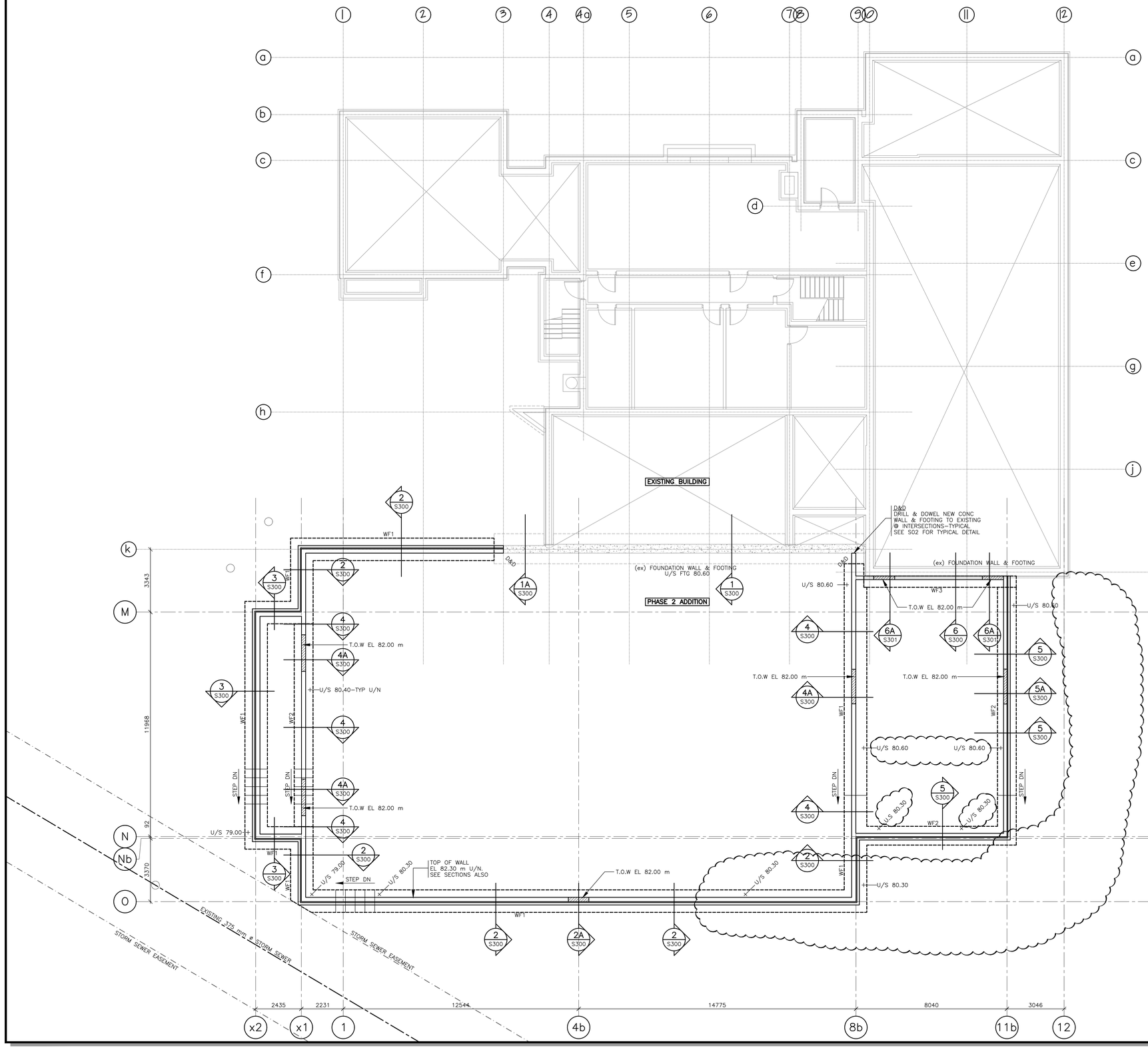
LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. I. CUNLIFFE
PROVINCE OF ONTARIO

SCALE: NOT TO SCALE

DRAWN	REVIEWED
RW	RIC

PROJECT NO.	SHEET No.
17–007	S02

REVISION NO. 3



CONCRETE COMPRESSIVE STRENGTH

INTERIOR SLAB ON GRADE – 25 MPa TYPE N
INTERIOR FOUNDATION WALLS – 25 MPa TYPE N
EXTERIOR SLAB ON GRADE – 35 MPa CLASS C1
PERIMETER FOUNDATION WALLS – 30 MPa TYPE F1
FOOTINGS – 25 MPa TYPE N

FOOTING SCHEDULE

MARK	SIZE	REINF'G
WF1	1200 x 300 DP	4–15M BOTTOM CONT
WF2	1000 x 300 DP	3–15M BOTTOM CONT
WF3	600 x 250 MIN DP	SEE SECTION 6 ON S300

CONCRETE COVER TO REINFORCING AS FOLLOWS:
75 mm FROM BOTTOM OF FOOTING
50 mm FROM SIDE OF FOOTINGS

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1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

DRAWING
FOUNDATION PLAN

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3/8/2018
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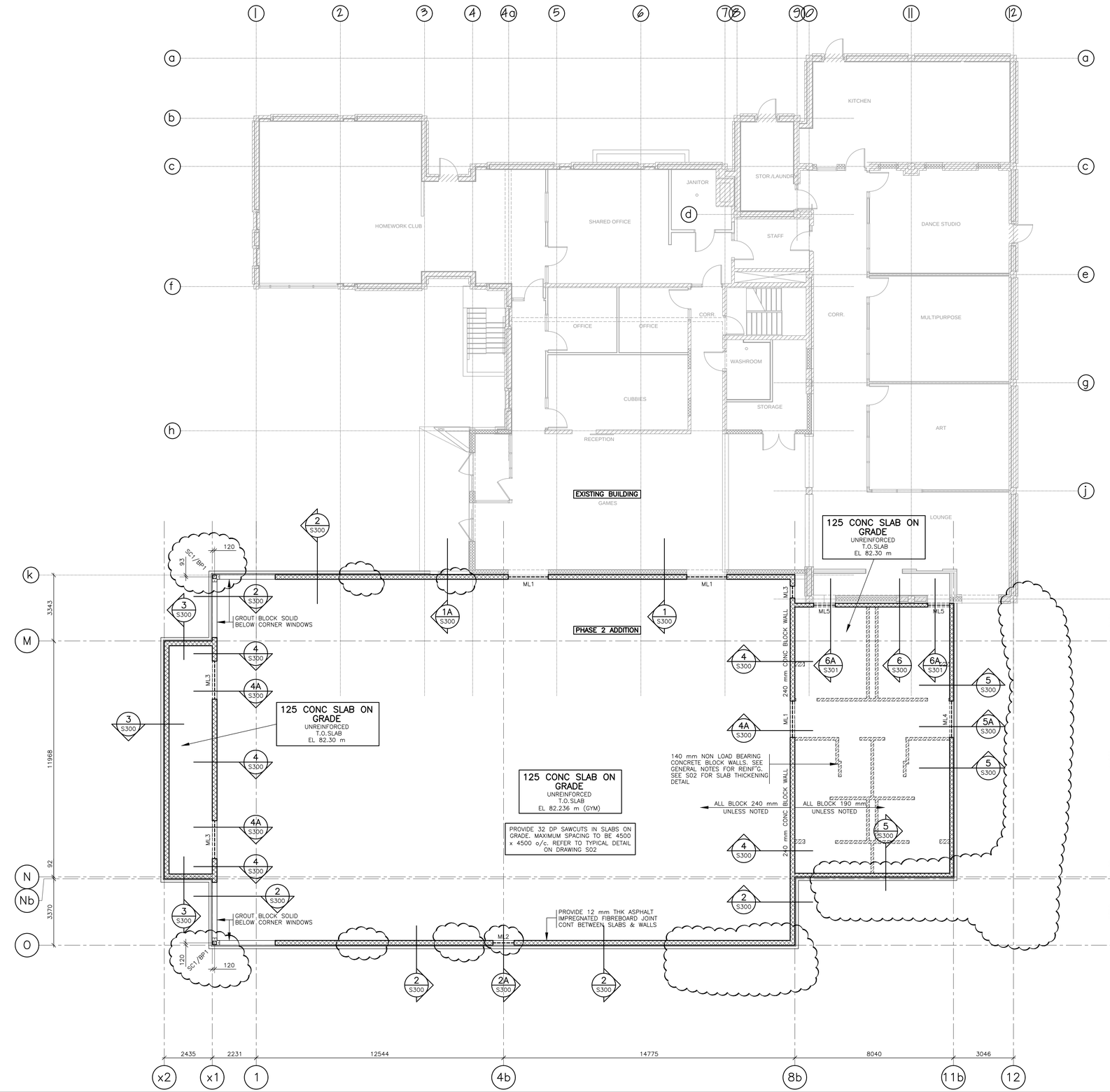
PROVINCE OF ONTARIO

SCALE 1 : 100

DRAWN RW | REVIEWED RIC

PROJECT NO. 17–007 | SHEET No. S100

REVISION NO. 3

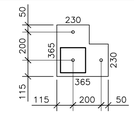


CONCRETE COMPRESSIVE STRENGTH

INTERIOR SLAB ON GRADE – 25 MPa TYPE N
INTERIOR FOUNDATION WALLS – 25 MPa TYPE N
EXTERIOR SLAB ON GRADE – 35 MPa CLASS C1
PERIMETER FOUNDATION WALLS – 30 MPa TYPE F1
FOOTINGS – 25 MPa TYPE N

STEEL COLUMN SCHEDULE	
MARK	SIZE
SC1	HSS 178 x 178 x 6.4

BASEPLATE SCHEDULE		
MARK	SIZE	ANCHORS
BP1	365 x 365 x x 230 x 20 THK	3–15M x 400 Lg WELDABLE REBAR CAST INTO BLOCK BELOW



BP1

MASONRY LINTEL SCHEDULE		
MARK	SIZE	REINF'G
ML1	240 x 790 DP	1–15M TOP 1–20M BOTTOM 20M @ 800 VERT
ML2	240 x 590 DP	1–15M TOP 1–20M BOTTOM 20M @ 800 VERT
ML3	240 x 390 DP	1–20M BOTTOM 20M @ 800 VERT
ML4	190 x 790 DP	1–15M TOP 1–20M BOTTOM 15M @ 800 VERT
ML5	190 x 590 DP	1–15M TOP 1–20M BOTTOM 15M @ 800 VERT

NOTE:
1. ALL LINTELS ARE TO BE GROUTED SOLID
2. LINTELS TO BEAR ON WALL EACH END 200 mm U/N.
3. GROUT WALL ENDS SOLID BELOW LINTEL FOR WIDTH OF BEARING INDICATED ABOVE.
4. SEE DRAWING S01 FOR MASONRY REINFORCEMENT. PROVIDE 20M VERT IN EACH GROUTED CORE AT WALL ENDS E.S. OF OPENING UNLESS NOTED OTHERWISE ON PLANS.
5. USE SPECIAL LINTEL BLOCKS FOR LOWEST LINTEL COURSE & LOW WEB BLOCKS FOR ALL OTHER LINTEL COURSES.
6. DO NOT INTERRUPT TYPICAL WALL REINFORCING AT LINTELS.

NON–LOAD BEARING WALL
MASONRY LINTEL SCHEDULE

SPAN	SIZE & REINF'G
0 – 1000 mm	200 DP 1–15M BOT CONT
1001 – 1900	400 DP 1–20M BOT CONT
1901 – 2500	600 DP 1–20M TOP & BOT CONT
2501 – 3200	800 DP 1–20M TOP & BOT CONT

NOTE:
1. ALL MASONRY LINTELS ARE TO BE GROUTED SOLID
2. GROUT WALL ENDS SOLID BELOW LINTEL FOR WIDTH OF 200 mm LINTEL BEARING
3. SEE DRAWING S01 FOR MASONRY REINFORCEMENT. PROVIDE 1–20M VERT IN EACH GROUTED CORE AT WALL ENDS EACH SIDE OF LINTEL OPENING UNLESS NOTED OTHERWISE ON PLANS.
4. USE LOW WEB BLOCKS FOR LINTEL COURSES CONTAINING HORIZONTAL REBAR

MASONRY LINTEL SCHEDULE FOR LOAD BEARING WALLS WHERE LINTEL IS NOT SHOWN ON PLAN (ie. MECH'L WALL OPENINGS)

140/190/240 mm CONC BLOCK

SPAN	MASONRY LINTEL
0 – 1000 mm	400 DP 1–15M BOT CONT
1001 – 1500	600 DP 1–20M TOP & BOT CONT
1501 – 2000	800 DP 1–20M TOP & BOT CONT

NOTE:
1. ALL MASONRY LINTELS ARE TO BE GROUTED SOLID
2. GROUT WALL ENDS SOLID BELOW LINTEL FOR WIDTH OF 200 mm LINTEL BEARING
3. SEE DRAWING S01 FOR MASONRY REINFORCEMENT. PROVIDE 1–20M VERT IN EACH GROUTED CORE AT WALL ENDS EACH SIDE OF LINTEL OPENING U/N
4. USE LOW WEB BLOCKS FOR LINTEL COURSES CONTAINING HORIZONTAL REBAR

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1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

DRAWING
GROUND FLOOR PLAN

CUNLIFFE & ASSOCIATES
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ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. I. CUNLIFFE
PROVINCE OF ONTARIO

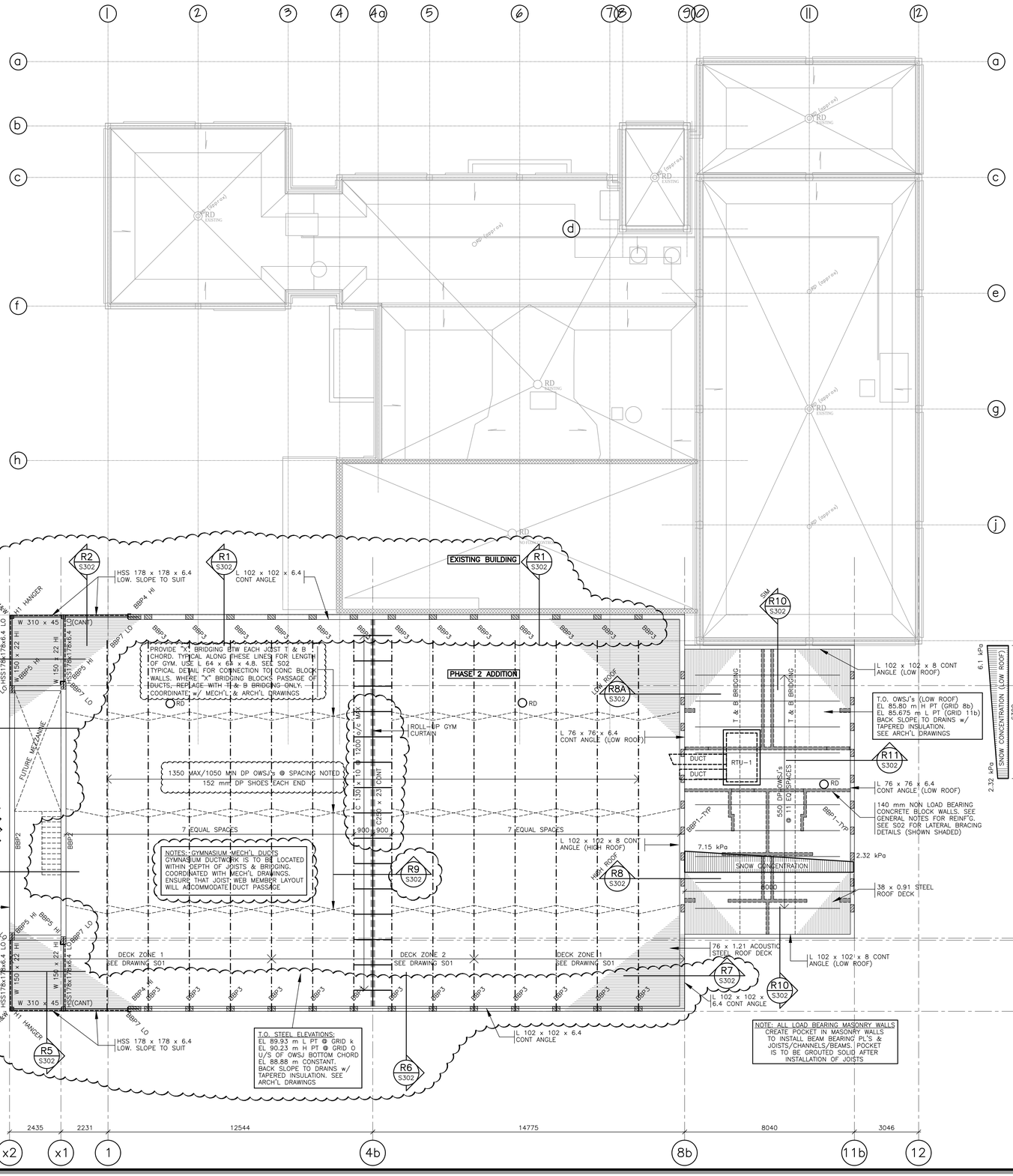
SCALE 1 : 100

DRAWN RW | REVIEWED RIC

PROJECT NO. 17–007

SHEET No. S101

REVISION NO. 3



CONCRETE COMPRESSIVE STRENGTH
SLAB ON DECK – 25 MPa TYPE N

BEAM BEARING PLATE SCHEDULE		
MARK	SIZE	ANCHORS
BBP1	350 x 180 x 19 THK PLATE	2–15M WELDABLE REINFORCING BARS x 400 Lg
BBP2	200 x 13 THK CONT PLATE	1–15M WELDABLE REINFORCING BAR x 400 Lg @ 600 o/c
BBP3	230 x 350 x 19 THK PLATE	2–20M WELDABLE REINFORCING BARS x 400 Lg
BBP4	600 x 230 x 25 THK PLATE	3–20M WELDABLE REINFORCING BARS x 400 Lg
BBP5	230 x 350 x 16 THK PLATE	2–15M WELDABLE REINFORCING BARS x 400 Lg
BBP6	275 x 275 x 16 THK PLATE	3–16 ø HILTI HAS HIT HY200 ANCHORS (143 EMBEDMENT) SEE SECTION R3 ON S302
BBP7	375 x 209 x 16 THK PLATE + 178 x 150 x 16 THK PLATE FULLY WELDED TOGETHER	3–16 ø HILTI HAS HIT HY200 ANCHORS (143 EMBEDMENT) SEE SECTION R3 ON S302

NOTES:
1. BEAMS SUPPORTED ON BEAM BEARING BASE PLATES TO EXTEND ONTO PLATE A MINIMUM OF 80% OF LENGTH OF PLATE, IN DIRECTION OF BEAM UNLESS NOTED OTHERWISE ON PLAN.
2. ANCHORS ARE TO BE CENTERED ON PLATE & SPACED AT 200 o/c TO ALIGN WITH CORE VOIDS IN BLOCK UNLESS OTHERWISE NOTED
3. ENSURE BEAM AND JOIST POCKETS IN MASONRY WALLS ARE BUILT-IN WITH MASONRY OR GROUTED SOLID.
4. GROUT BLOCK CORES SOLID 600 mm MINIMUM BELOW BEAM BEARING PLATES

ROOF TOP MECHANICAL UNITS

RTU-1
2311 x 1448 x 1600 HIGH
(INCLUDES 356 mm CURB)
WT=1400 LBS (INCLUDES CURB)

NOTES:
1. REFER TO DWG S02 FOR ADDITIONAL FRAMING BELOW MECH'L UNITS & AT ROOF OPENINGS
2. REFER TO DWG S02 FOR CONCRETE SLAB DETAILS BELOW MECH'L UNITS
3. COORDINATE MECH'L UNIT OPENINGS WITH MECH'L ENGINEER
4. NOTIFY CUNLIFFE & ASSOCIATES IF ANY OF THE MECH'L UNIT INFORMATION NOTED ON THIS DRAWING DIFFERS FROM THE ACTUAL UNITS SUPPLIED FOR INSTALLATION.
5. 102 MAX/64 MIN CONC SLAB ON 38 x 0.91 COMPOSITE STEEL DECK. REINFORCE SLAB w/ 1 LAYER 152 x 152 x MW 18.7 x MW18.7 @ MIDDEPTH OF SLAB. TOP OF SLAB TO BE LEVEL. SEE DETAIL ON DRAWING S02.

STEEL HANGER SCHEDULE	
MARK	SIZE
H1	HSS 152 x 152 x 6.4 HANGER FROM U/S W310 x 45 TO TOP OF HSS 178 x 178 (FULLY WELD)

MAIN ROOF NOTES:
1. SEE DRAWING S01 FOR GENERAL NOTES
2. SEE DRAWING S02 FOR TYPICAL DETAILS
3. DESIGN LOADS:

TYPICAL STEEL ROOF AREAS	
ROOF'G & INSUL.	0.60 kPa
BOARD	0.10
STEEL DECK	0.15
STRUCTURE	0.25
CEILING	0.15
MECH. & MISC.	0.25
DEAD LOAD	1.50 kPa
SNOW LOAD	2.32 kPa (OR CONCENTRATION)
TOTAL LOAD	3.82 kPa (OR DL + CONCEN)

STEEL ROOF AREAS AT RTU	
ROOF'G & INSUL.	0.60 kPa
SLAB ON DECK	3.00
STEEL DECK	0.15
STRUCTURE	0.25
CEILING	0.15
MECH. & MISC.	2.60
DEAD LOAD	6.75 kPa
SNOW LOAD	2.32 kPa (OR CONCENTRATION)
TOTAL LOAD	9.07 kPa (OR DL + CONCEN)

GYMNASIUM ROOF AREAS	
ROOF'G & INSUL.	0.60 kPa
BOARD	0.10
STEEL DECK	0.20
STRUCTURE	0.35
MECH. & MISC.	0.20
DEAD LOAD	1.45 kPa
SNOW LOAD	2.32 kPa
TOTAL LOAD	3.77 kPa

MEZZANINE	
64 CONC ON DECK	1.90 kPa
STEEL DECK	0.10
STRUCTURE	0.20
MECH. & MISC.	0.25
DEAD LOAD	2.45 kPa
SNOW LOAD	4.80 kPa
TOTAL LOAD	7.25 kPa

4. T.O.S = TOP OF STRUCTURE ELEV. = TOP OF OWSJ's & GLULAM BEAMS. SEE PLAN FOR ELEVATIONS
5. REFER TO PLAN & SECTIONS FOR ADDITIONAL DEFLECTION LIMITATIONS.
6. D W S J ' S
.1 U/N. THE TYPICAL ROOF OWSJ'S ARE TO BE DESIGNED SUCH THAT THE MAX DEFLECTION DUE TO SNOW LOADS DOES NOT EXCEED L/360 OR
.2 THE GYMNASIUM ROOF JOISTS ARE TO BE DESIGNED FOR A SNOW LOAD DEFLECTION OF 38 mm EXCEPT FOR THE JOIST IMMEDIATELY ADJACENT, AND SUPPORTING, THE ROLL-UP CURTAIN. THESE 2 JOISTS ARE TO BE LIMITED TO A SNOW LOAD DEFLECTION OF 25 mm.
.2 OWSJ SUPPLIER TO DESIGN OWSJ'S FOR DESIGN LOADS INDICATED AND ADDITIONAL EQUIPMENT LOADS & LOADS NOTED ON OTHER DWGS
.3 OWSJ SHOE DEPTH 100 mm UNLESS NOTED
7. OWSJ TOP & BOTTOM CHORD BRIDGING
.1 OWSJ MANUFACTURER IS RESPONSIBLE FOR BRIDGING DESIGN & DETAILING UNLESS NOTED OTHERWISE.
.2 OWSJ MANUFACTURER TO REVIEW BRIDGING REQUIREMENTS WITH RESPECT TO ERECTION AND WIND SUCTION ON THE ROOF AND ADD BRIDGING AS REQUIRED.
.3 BRIDGING IS TO BE NEATLY ERECTED IN ROOMS WITHOUT CEILINGS.
.4 PROVIDE DIAGONAL BRIDGING AT BEAMS & AT END SPACES. CONNECT BRIDGING TO BLOCK WALLS.
.5 MINIMUM BRIDGING ANGLE SIZE TO BE L 35 x 35 x 3
8. SEE DRAWING S02 FOR TYPICAL DETAILS FOR MECH'L UNIT SUPPORT & MECH'L OPENING FRAMING UNLESS NOTED
9. ENSURE THAT WELDING PROCEDURES DO NOT DAMAGE OWSJ'S
10. REFER TO ARCHITECTURAL DRAWINGS FOR SUPPLEMENTARY INFORMATION AND ALLOW FOR ARCHITECTURAL REVIEW PRIOR TO FABRICATION.
11. MECHANICAL OPENINGS SHOWN ON THIS PLAN ARE 300 x 300 mm IN SIZE OR LARGER. SEE MECH'L, ELECT'L & ARCH'L DWGS FOR SMALLER OPENINGS. CONFIRM SIZE OF OPENINGS WITH MECH'L DWGS. SEE TYPICAL DETAIL ON DWG S02 FOR ADDITIONAL OPENING FRAMING UNLESS NOTED
12. MECHANICAL PIPING MUST BE SUPPORTED FROM OWSJ TOP CHORD ONLY. DO NOT SUPPORT FROM OWSJ BOTTOM CHORD OR WEB MEMBERS OR STEEL DECK. SUPPORT AT OR NEAR OWSJ TOP CHORD PANEL POINT IS PREFERRED. IF NECESSARY, OWSJ MANUFACTURER IS TO COMMENT ON PERMISSIBILITY OF LOCATING PIPING SUPPORTS BETWEEN TOP CHORD PANEL POINTS.

No.	REVISION	DATE
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2	ISSUED WITH IB–S02–A	JAN 25/18
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PROJECT
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1463 PRINCE OF WALES DR

ARCHITECT
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DRAWING
ROOF PLAN

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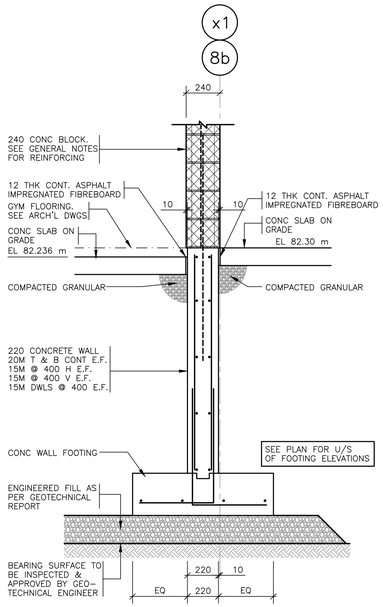
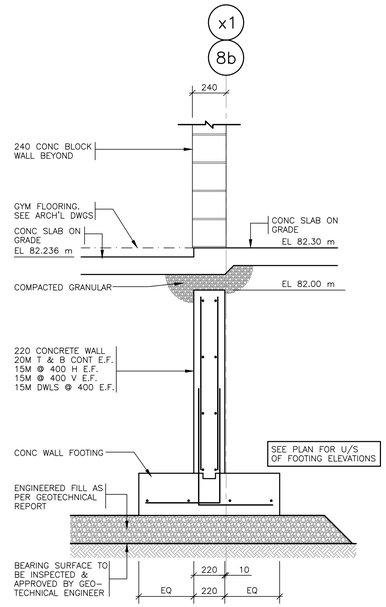
LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. I. CUNLIFFE
PROVINCE OF ONTARIO

SCALE 1 : 100
DRAWN RW
REVIEWED RIC
PROJECT NO. 17–007
SHEET No. S102
REVISION NO. 3



4 SECTION S100 1 : 20



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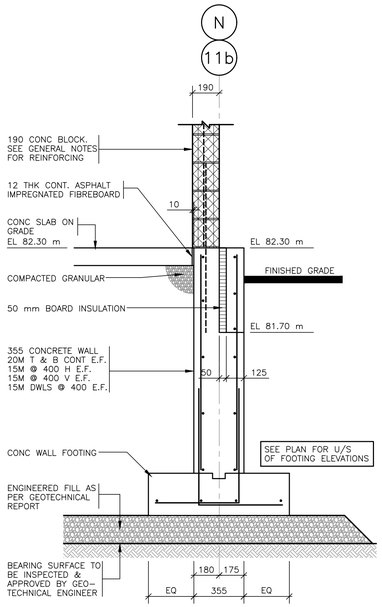

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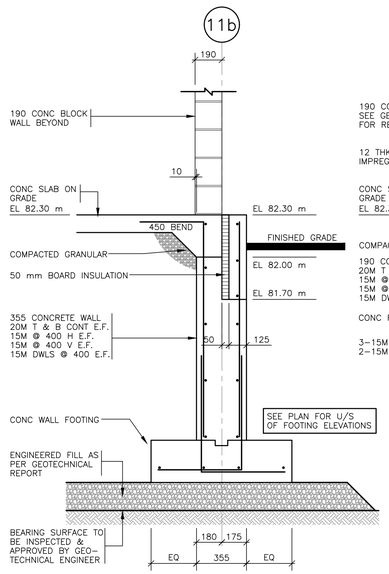

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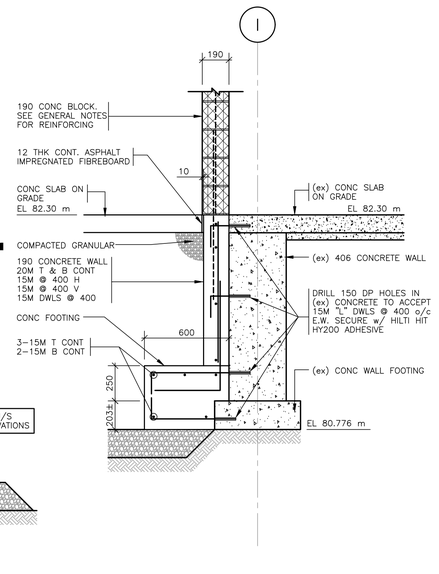
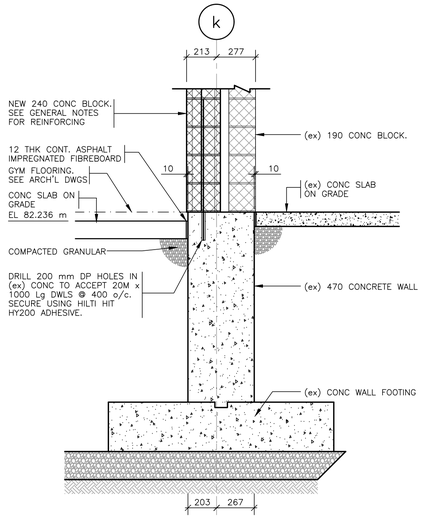


6 SECTION S100 1 : 20



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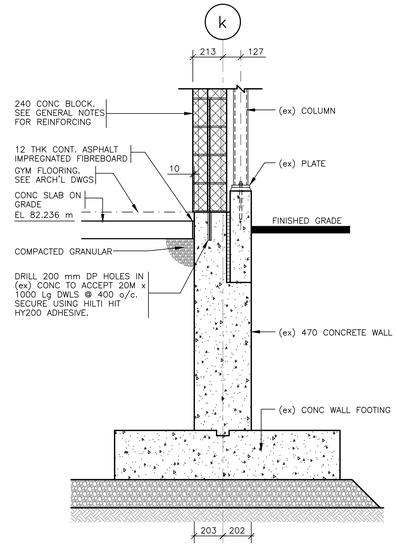

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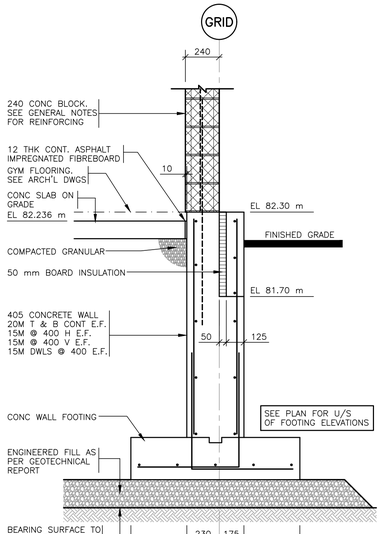

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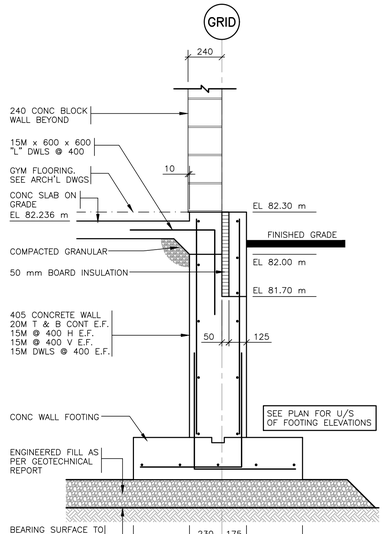

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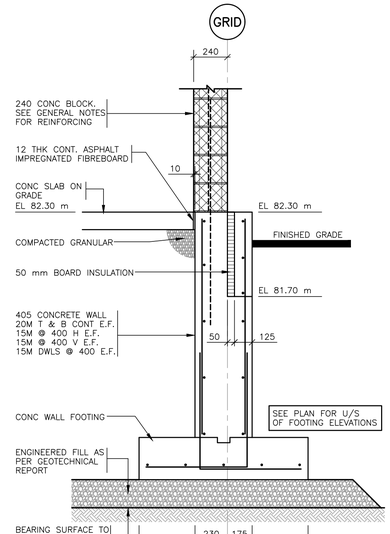

3 SECTION S100 1 : 20

No.	REVISION	DATE
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2	ISSUED WITH IB-SO2-A	JAN 25/18
1	ISSUED FOR BUILDING PERMIT	OCT 27/17

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PROJECT
BOYS & GIRLS CLUB OF OTTAWA
1463 PRINCE OF WALES DR

ARCHITECT
HOBIN ARCHITECTURE INC

DRAWING
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SCALE 1 : 20 U/N
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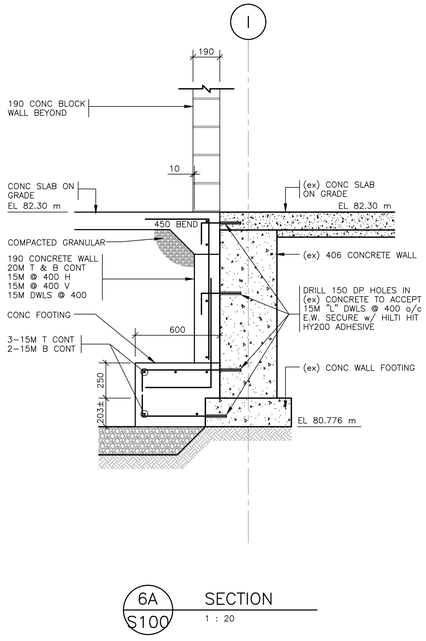
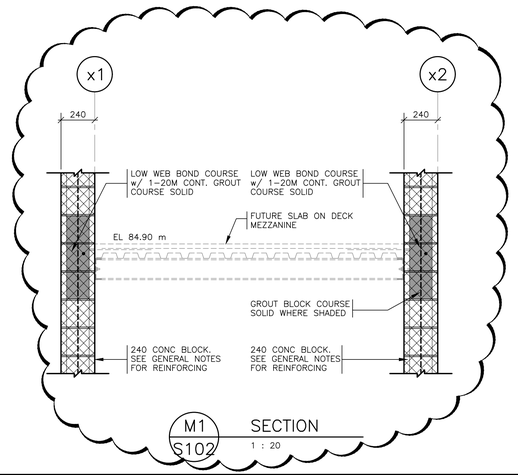
REVIEWED RIC
PROJECT NO. 17-007
SHEET No. S300
REVISION NO. 3



6A / S100 SECTION
1 : 20



M1 / S102 SECTION
1 : 20

No.	REVISION	DATE
3	RE-ISSUED FOR PHASE 2 BUILDING PERMIT	MAR 8/18
2	ISSUED WITH 18-502-A	JAN 25/18
1	ISSUED FOR BUILDING PERMIT	OCT 27/17

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3/8/2018
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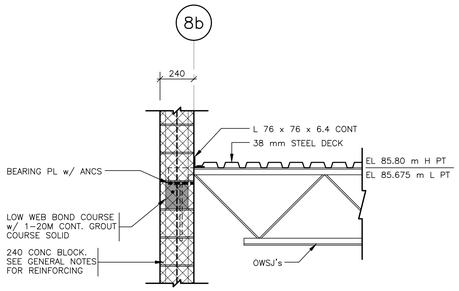
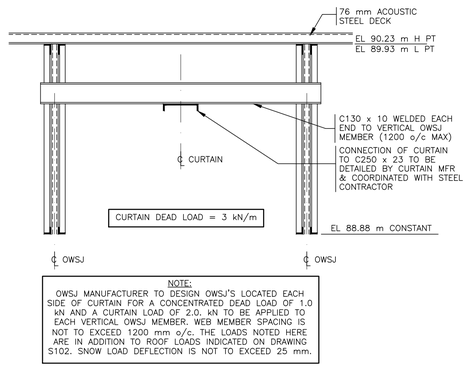
SCALE 1 : 20 U/N
DRAWN RW
REVIEWED RIC
PROJECT NO. 17-007
SHEET No. S301
REVISION NO. 3



R8A S102 SECTION 1 : 20



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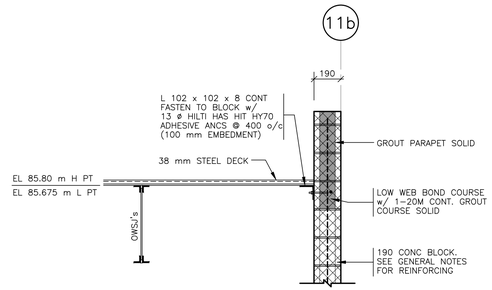

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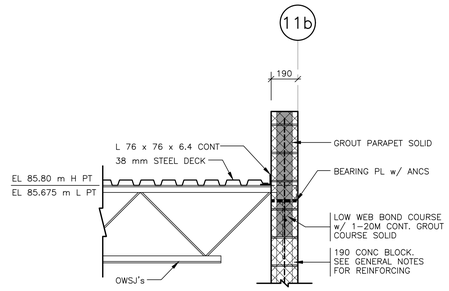

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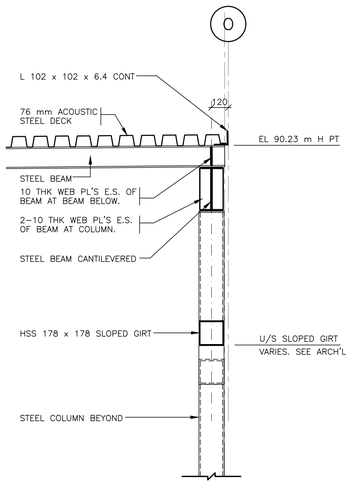
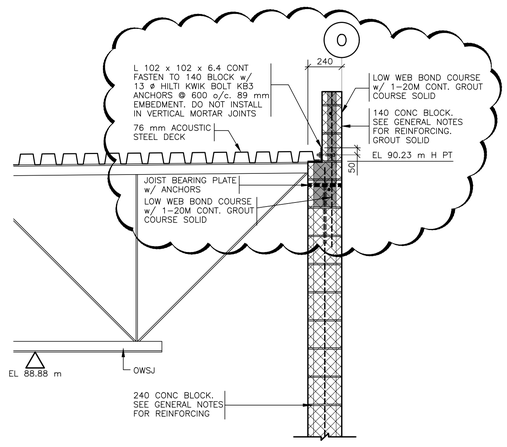
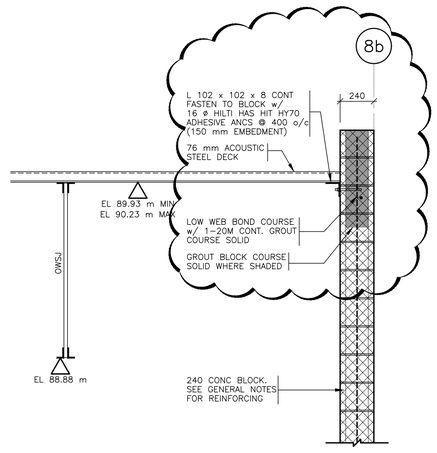


R5 S102 SECTION 1 : 20



R6 S102 SECTION 1 : 20



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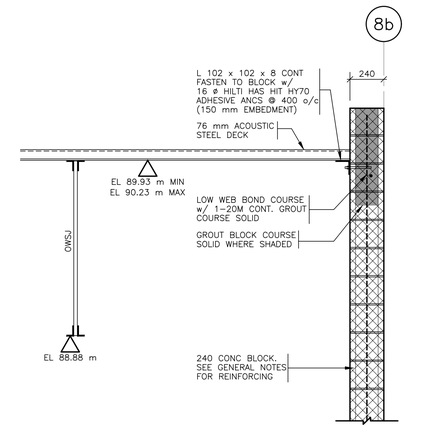

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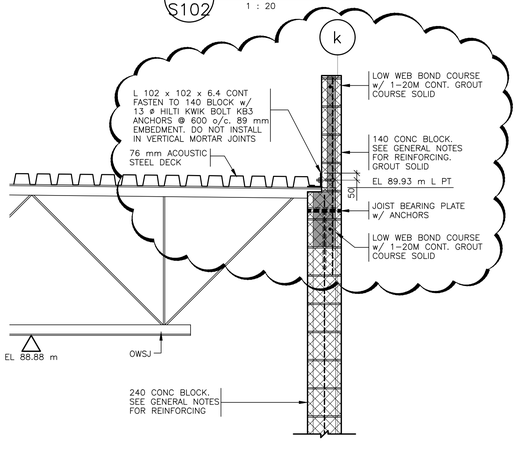

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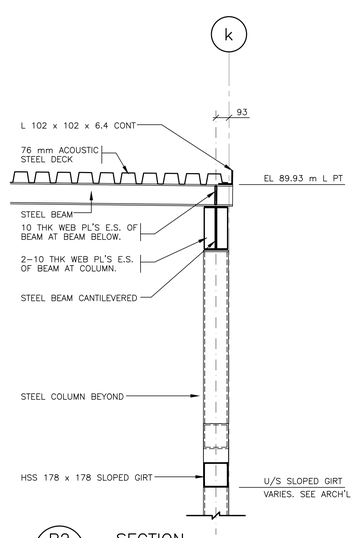

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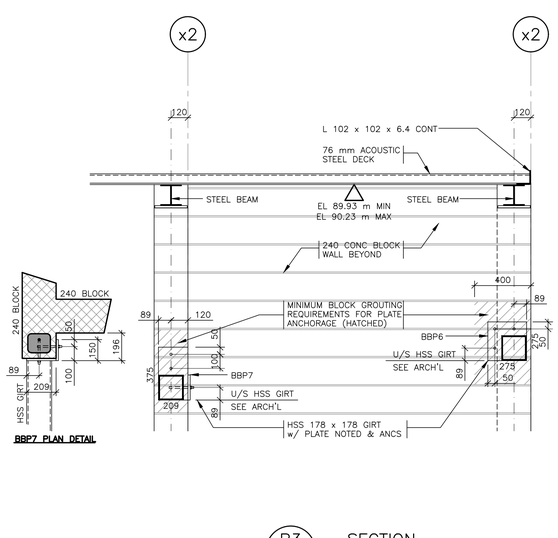

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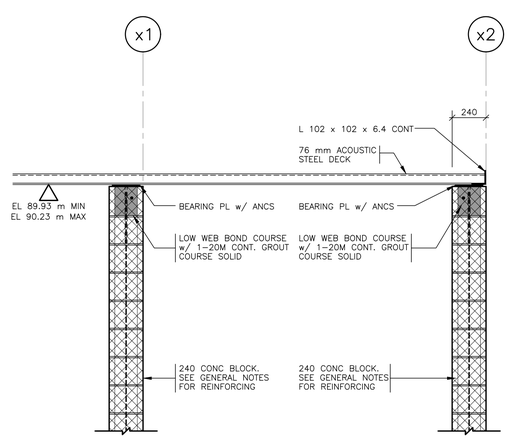

R4 S102 SECTION 1 : 20

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ENGINEER'S SEAL

LICENSED PROFESSIONAL ENGINEER
3/8/2018
R. J. CUNLIFFE
PROVINCE OF ONTARIO

SCALE 1 : 20 U/N
DRAWN RW
REVIEWED RIC
PROJECT NO. 17-007
SHEET No. S302
REVISION NO. 3